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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,848	08/21/2003	Gert-Ove WAHLSTROM	07589.0127.PCUS00	1847
28694	7590	10/24/2006	EXAMINER	
NOVAK DRUCE & QUIGG, LLP 1300 EYE STREET NW 400 EAST TOWER WASHINGTON, DC 20005			SAN MARTIN, EDGARDO	
			ART UNIT	PAPER NUMBER
			2837	

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/604,848	WAHLSTROM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Edgardo San Martin	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1 – 4, 6, 7, 9 – 11, 18, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Okawa et al. (JP 02173313).

With respect to claims 1, 9 – 11, 18, 20 and 21, Okawa et al. teach an apparatus for damping resonance in a conduit (Fig.3) for transporting exhaust gases from an internal combustion engine, which conduit is provided with at least one perforation (Fig.3, Item 4) located at a distance from the outlet end (Fig.3, Item 2) of the conduit and at a point (Fig.3, Item 5) in the conduit with a comparatively lower static pressure than downstream therefrom, the perforation forming an acoustic connection between the interior of the conduit and the surrounding atmosphere (Fig.3). The Examiner considers that the subject matter described by claims 9 – 11 is inherently taught by the structure described in claim 1, it is just the description of how the structure of claim 1 works, based on the Venturi effect.

With respect to claims 2 and 3, Okawa et al. teach wherein the lower static pressure in the vicinity of the perforation is brought about by means of a reduction in the cross section of the conduit (Fig.3, Item 5); and wherein the reduction in the cross section of the conduit is designed as a venturi (Fig.3).

With respect to claim 4, Okawa et al. teach wherein the reduction in the cross section of the conduit designed as a venturi is covered on the outside with a sound absorbing material (Fig.3, Item 3).

With respect to claims 6 and 7, Okawa et al. teach wherein the lower static pressure in the vicinity of the perforation is brought about by means of a change in direction of the gas flow in the conduit, and wherein the change in direction of the gas flow is brought about by means of a curve of the conduit (Fig.3), that is how the Venturi effect is created.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okawa et al. (JP 02173313) in view of Ciapetta et al. (US 3,471,265).

Okawa et al. teach the limitations discussed in a previous rejection, but fail to disclose wherein the sound-absorbing material is covered by a perforated plate.

Nevertheless, Ciapetta et al. teach a pipe portion designed as a venturi (Fig.3) being covered on the outside with a catalytic material (Fig.3, Item 58) covered by a perforated plate (Fig.3, Item 60).

It would have been obvious to a person with ordinary skill in the art at the time of the invention was made to employ the Ciapetta et al. perforated cover plate to cover the Okawa et al. sound absorbing material because the perforated cover plate would provide an exit for the exhaust gases that escape to the ambient through the perforations, in a low pressure stage of the engine, eliminating the creation of a high pressure environment that could further create a backpressure that could decrease the performance of the engine.

3. Claims 8, 12 – 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okawa et al. (JP 02173313).

With respect to claims 8 and 19, Okawa et al. teach the limitations discussed in the previous rejections, but fail to disclose wherein the perforations are covered by means of a sound-permeable fabric on the inside or outside of the conduit.

The Examiner takes Official Notice that it is well known in the art of acoustics to employ a sound permeable fabric in acoustics applications that it is desired to let the sound flow freely while providing a protection against undesired presence of particles or materials, as it is used in speaker grills applications and sound absorbing materials with water resistance treatments.

It would have been an obvious matter of design choice to employ a sound permeable fabric covering because it would serve as a filter against undesired particles while permitting the free flow of the exhaust gas.

With respect to claims 12 – 17, Okawa et al. teach the limitations as described in the claims as previously discussed with respect to claims 2 – 4, 6 and 7.

***Response to Arguments***

4. Applicant's arguments filed on January 3, 2006 have been fully considered but they are not persuasive. The Examiner considers that the patents to Okawa et al. and Ciapetta et al. teach the limitations described in the claims. Regarding the recitation establishing "an apparatus for damping resonance in a conduit", the Examiner gave little patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951); furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex Parte Masham*, 2 USPQ F.2d 1647 (1987).

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

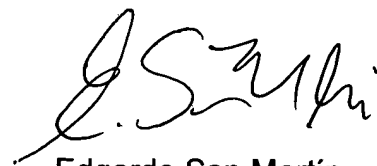
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edgardo San Martin whose telephone number is (571) 272-2074. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-2800 ext.37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Edgardo San Martín  
Primary Examiner  
Art Unit 2837  
Class 181  
October 18, 2006